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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 09/657,915 | 09/08/2000 | Gino Anthony Scribano | CE08306R C02 | 2507 |

7590 03/11/2004
Ray Warren (RSV)
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EXAMINER

HAN, CLEMENCE S

ART UNIT PAPER NUMBER

2665

DATE MAILED: 03/11/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/657,915

Applicant(s)

SCRIBANO ET AL.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. Responsive to amendment received on January 14, 2004, amended claims 1, 3 and 4 are entered as requested and new claim 5 is entered as requested.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkinen et al. (WO 00/41431) in view of Dempo (US Patent 6,587,465).

In regarding to claim 1, Heikkinen teaches controlling, in a base station transceiver, a header for a packet frame to be communicated between the base station transceiver and the network controller wherein a portion of the header identifies the frame as defective one (Page 9 Line 26-27, Page 11 Line 29), and transmitting the frame to the network controller with the constructed header (Page 10 Line 32-33). Heikkinen, however, does not teach determining whether to convey information received from a mobile station in a backhaul frame based on a decoding metric and in response to determining to not convey the information in

the frame, controlling, in a base station transceiver, a header for a packet frame to be communicated between the base station transceiver and the network controller wherein a portion of the header identifies the frame as one containing no data package and transmitting the frame to the network controller with the constructed header and without the data package. Dempo teaches determining whether to convey information received from a mobile station in a backhaul frame based on a decoding metric 1100 and in response to determining to not convey the information in the frame, controlling, in a base station transceiver, a header for a packet frame to be communicated between the base station transceiver and the network controller wherein a portion of the header identifies the frame as one containing no data package (Column 9 Line 14-23) and transmitting the frame to the network controller with the constructed header and without the data package (Column 12 Line 37-46). It would have been obvious to one skilled in the art to modify Heikkinen to send dummy packet in place of defective packet as taught by Dempo in order to utilize the bandwidth more efficiently (Column 12 Line 44-46).

In regarding to claim 2, Heikkinen teaches data bits of a header field contain a predetermined bit pattern for a frame including no data package (Page 9 Line 28).

In regarding to claim 3, Heikkinen teaches the steps of dropping the information received by the base station from the mobile station and replacing the

header information with the specific bit pattern if a decoding metric passes a threshold (Page 11 Line 9-11).

In regarding to claim 4, Heikkinen teaches the steps of dropping the information received by the base station from the mobile station and replacing the header information with the specific bit pattern if a CRC for the frame received from the mobile station fails (Page 11 Line 4-6).

In regarding to claim 5, Heikkinen teaches using a signal-to-noise ratio as the decoding metric (Page 11 Line 9-11).

Response to Arguments

4. Applicant's arguments filed January 14, 2004, have been fully considered but they are not persuasive.

5. The applicants argue that Heikkinen teaches backhauling received data regardless of whether the data is defective. However, Heikkinen also teaches the dropping defective data in the base station before transmitting to the network controller (Page 13 Line 14-23). Heikkinen teaches tagging a defective frame and dropping it either in the base station or in the controller. Heikkinen does not teach dropping only data portion of the frame and transmitting a tagged header to the controller. Dempo teaches dropping only data portion of the frame (Column 12 Line 37-46) and transmitting a tagged header to the controller (Column 9 Line 14-

23). Therefore, the examiner contends that Heikkinen in view of Dempo teaches a base station detecting and tagging a defective frame from mobile station and transmitting only tagged header to the controller.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the base station in general.

U.S. Patent 6,341,124 to Johansson et al.

U.S. Patent 6,353,742 to Bach

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. V.
Clemence Han
Examiner
Art Unit 2665



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2665